

REMARKS

Claims 22-104 are pending in the Application and all were rejected in the Office action mailed September 3, 2008. Claims 22, 28, 38, 39, 45, 55, 58, and 73 have been amended and new claims 105-112 have been added. Claims 22, 39, 58 and 73 are independent claims. Claims 23-38, 93-96, 105, and 106, claims 40-57, 97-100, 107, and 108, claims 59-72, 101-104, 109, and 110, and claims 74-92, 111, and 112 depend from independent claims 22, 39, 58 and 73, respectively.

The Applicants respectfully request reconsideration of the pending claims 22-104, and consideration of new claims 105-112, in light of the following remarks.

Objections to Claims

Claims 22-57 and 93-100 were objected to due to informalities. Although Applicants do not concede that the language "adapted to/for" makes any aspect of the claims optional, Applicants have amended claims 22 and 39 as shown above to further the Application towards allowance. Applicants respectfully submit that these amendments do not add new matter nor change the scope of the amended claims, and that the objections to claims 22 and 39 and any claims that depend therefrom are thereby overcome.

Amendments to Claims

Claims 22, 28, 38, 39, 45, 55, 58, and 73 have been amended as shown above to more clearly define the subject matter of the claims, and to correct minor claim drafting errors recognized by the Applicants. Applicants respectfully submit that the nature of a "packet" is well known to those of ordinary skill in the relevant art and, for that reason, the related amendments to claims 22, 39, 58, and 74 simply make explicit what was implicitly part of claims 22, 39, 58, and 73 as part of the knowledge of one of ordinary skill in the art. Applicants respectfully submit that no new matter is added by the amendments to claims 22, 28, 38, 39, 45, 55, 58, and 73.

Rejections Of Claims

Claims 22, 24, 25, 28-30, 33-39, 41, 42, 45-47, 50-58, 61, 63-66, 69-73, 76, 82-86 and 89-104 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken (WO 91/08629) in view of Richter, et al. (US 6,104,706, hereinafter "Richter") and Mahany (US 4,910,794). Claims 23, 40, and 81 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Richter, Mahany, and Cripps (US 5,838,730). Claims 26, 27, 31, 32, 43, 44, 48, 49, 59, 60, 62, 74 and 75 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Richter, Mahany and Perkins (US 5,159,592). Claim 67 was rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Richter, Mahany, and Callon et al. (US 5,251,205, hereinafter "Callon"). Claim 68 was rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Richter, Mahany, and Reece et al. (US 5,915,214, hereinafter "Reece"). Claims 77-79 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Richter, Mahany, and Lewen et al. (US 5,341,374, hereinafter "Lewen"). Claim 80 was rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Richter, Mahany, Lewen, and McKee et al. (US 5,477,531, hereinafter "McKee"). Claims 87 and 88 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Richter, Mahany, and Focsaneanu et al. (US 5,610,910, hereinafter "Focsaneanu").

Claims 22, 39, 58, 63, and 73 were rejected under 35 U.S.C. 103(a) as being unpatentable over Berken, Shachar (US 5,764,736), and Mahany.

Applicants note that all claims are rejected for alleged reasons of obviousness. Applicants respectfully traverse the rejections. Notwithstanding the above, Applicants have amended claims 22, 39, 58, and 73 to respond to requirements of the Office, and to more clearly define the subject matter of the claims. Applicants respectfully submit that the amendments to claims 22, 39, 54, and 73 render the rejections of the instant Office action moot.

Applicants respectfully submit that the Office action has failed to establish a *prima facie* case of obviousness, in accordance with M.P.E.P. §2142. According to

M.P.E.P. §2142, "[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness." M.P.E.P. §2142 further states that "[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious." As recognized in M.P.E.P. §2142, "[t]he Supreme Court in *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007), 82 USPQ2d 1385, 1396 noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit." In addition, the Federal Circuit has made clear that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also *KSR*, 127 S. Ct. 1727 (2007), 82 USPQ2d at 1396.

In addition, M.P.E.P. §2143.03 states, in part:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

(emphasis added)

Applicants respectfully submit that claims 22, 39, 58, and 73, and, any claims that depend therefrom, define allowable subject matter, for at least the reasons set forth during prior prosecution, and in addition, for the reasons set forth below.

I. The Proposed Combination Of Berken, Mahany, And Richter Does Not Render Claims 22, 24, 25, 28-30, 33-39, 41, 42, 45-47, 50-58, 61, 63-66, 69-73, 76, And 82-86 Unpatentable

Claims 22, 24, 25, 28-30, 33-39, 41, 42, 45-47, 50-58, 61, 63-66, 69-73, 76, 82-86 and 89-104 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Richter and Mahany.

With regard to claim 22, Applicants respectfully submit that claims 22 recites, in part, "...wherein digital voice packets wirelessly communicated by the at least one portable terminal comprise destination information used for routing the digital voice packets through the communication network;...." Applicants respectfully submit that the proposed combination of references does not teach or suggest at least this aspect of Applicants' claim 22.

The instant Office action states, in part at page 5, "...Berken discloses a communication network ... comprising: ... wherein digital voice packets wirelessly exchanged by the at least one portable terminal comprise information used for routing (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header of the voice time slot) the digital voice packets through the communication network (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises control information for routing/transmitting/sending information through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises control information for routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN);...." Applicants respectfully note that the same rejection appeared in the Office action mailed May 15, 2007. Applicants addressed that same rejection at pages 17-24 of the Response filed November 15, 2007. Therefore, Applicants will not reproduce those arguments in their entirety again here. Applicants respectfully submit that the Office has failed to address the details of all of Applicants arguments presented in the Response filed November 15, 2007, either in the Office action mailed December 28, 2007, or in the Office action mailed September 3, 2008.

Applicants respectfully maintain that Berken does not teach a "digital voice packet" in accordance with Applicants' claim 22, for the reasons previously stated during prosecution and in addition, those that follow.

In response to Applicants' arguments of the Response filed November 15, 2007, the Office action mailed December 28, 2007 stated, at page 48, lines 19-20, "...Examiner is equating a frame that contains a control time slot and voice packet time slot (see Berken FIG. 2-3) to applicant's voice packet that comprises control information for routing." (emphasis in original) Therefore, the Office is clearly asserting that the "frame" of Berken teaches Applicants' claimed "digital voice packet". Applicants respectfully note that the Office mischaracterizes Applicants' claim 22, which does not recite a "...voice packet that comprises control information for routing...." Instead, Applicants' claim 22 recites, in part, "...wherein digital voice packets wirelessly communicated by the at least one portable terminal comprise destination information used for routing the digital voice packets through the communication network."

Applicants respectfully submit that the Office continues to misinterpret the teachings of Berken in regard to the term "frame", which the Office has identified as teaching the claimed "digital voice packet" of Applicants' claim 22. Applicants respectfully maintain that the "frame" of Berken is different from and does not teach or suggest Applicants' "packet" as recited by Applicants' claim 22.

Applicants again respectfully note that the term "packet" is defined by a recognized authority in the relevant art as "a unit of information transmitted as a whole from one device to another on a network." See, e.g., Microsoft Press Computer Dictionary, ©1991, Microsoft Corporation, page 253; Microsoft Press Computer Dictionary - Third Edition, ©1997, Microsoft Corporation, page 348. Applicants respectfully submit that this definition was well known to those of ordinary skill in the relevant art at the time of the invention. Applicants previously presented this authoritative definition in the Response filed November 15, 2007, at page 23, lines 4-7. The Office has not shown that the definition set forth by the Applicants is in error, or that its use in this context is in any way inappropriate. Indeed, the subsequent Office action,

mailed December 28, 2007, failed to even address the definition presented by the Applicants, and instead offered the following response to Applicants' argument at page 48, lines 19-20, without citation to any supporting authority:

In response to argument on "packet" and "frame" terms, both "packet" and "frame" has [sic] identical functionality of packaging or framing digitized voice data into the form (i.e. packet or frame) for transmission. Since they both have identical functionalities, they both are the same. Moreover, the combined system of Berken and Richter still discloses the "digitized voice data packet" as set forth above.

(emphasis in original)

Applicants respectfully disagree with this unsupported assertion by the Office, and respectfully request that the Office provide citation to a supporting authority for the statement that "...both "packet" and "frame" has [sic] identical functionality of packaging or framing digitized voice data into the form (i.e. packet or frame) for transmission. Since they both have identical functionalities, they both are the same." Applicants respectfully submit that the "frame" of Fig. 3 of Berken is not the same as, and does not teach or suggest the "digital voice packet" of Applicants' claim 22.

Applicants have previously shown (see Response filed November 15, 2007 at pages 17-24) that Berken teaches that time on a shared RF communication path is divided into "frames", that a "frame" is made up of a number of time slots that are used for the exchange of "packets". *Id.* at page 10, lines 16-22. Berken is clear that "...[a]ll time slots [of a frame] are available for use by any node or module requesting bandwidth..." *Id.* at page 10, lines 20-21. Berken also states that "...[t]he nodes use their allocated portion [allocated time slots] of the frame to communicate with user modules and other nodes." *Id.* at page 10, lines 25-26. Therefore, Applicants respectfully submit that the bandwidth of one time slot of a "frame" of time on the "shared RF communication path 107" of Berken may be allocated for the exchange of "voice packets" from, e.g., the "phone interface 209" of one "user module 103" to a "subscriber line interface 171" of "subscriber line interface unit 141" on a "node 100",

while the allocated bandwidth of another time slot of the same "frame" of Berken may be used for the exchange of "data packets" from, e.g., the "Ethernet interface unit 143" on "node 100" to a "LAN port 167" of the same or a different "user module 103". Berken teaches that bandwidth is allocated upon request, and that the bandwidth allocation remains in effect until a request is made to deallocate the bandwidth. *Id.* at page 9, lines 17-27. Applicants respectfully submit that time slots in each "frame" of Berken may, therefore, be allocated to the exchange of "data packets" and/or "voice packets" between various sending and receiving interfaces of any of the "user modules" and "nodes" of Fig. 1 of Berken. Therefore, Applicants respectfully submit that the "frame" of Berken is not "...a unit of information transmitted as a whole from one device to another on a network..." in accordance with the definition of "packet" set forth previously, but is instead a unit of time having a number of time slots representing bandwidth that may be allocated in response to a requesting device, to allow the exchange of packets with another device. If the Office believes Applicants' interpretation of Berken to be in error, Applicants respectfully request that the Office specifically identify the errors in Applicants' arguments, and explain with specificity why Applicants have misinterpreted the cited art, and how and why the Office has interpreted Berken as in the rejection.

The Office has asserted that the "...packet header of the voice time slot comprises control information for routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN);...." See Office action of September 3, 2008 at page 5, lines 7-12. Applicants respectfully submit that nothing in cited Figs. 3 and 4, at page 9, lines 1-10, or at page 10, lines 17-30 teach or suggest that anything in the "packet header" or "bus control" portions of the "packet" of Fig. 4 of Berken is used for "...routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN)...", as asserted by the Office. While Fig. 4 of Berken shows portions of a "time slot" labeled as "bus control", "packet preamble", "packet header", and "packet information", the mere mention of "bus control" or "packet header" does not teach information for "routing". Indeed, Berken mentions each of "bus control" and "packet header" only twice, once in Figs. 3 and 4, without any additional detail of what they contain or how they are used, and once at page 9, line 7, again without additional details. Therefore, Applicants

respectfully submit that Berken fails to provide any details about what "bus control" and "packet header" portions contain, or how they are used, and does not support the assertion by the Office that Berken teaches "...packet header of the voice time slot comprises control information for routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN);...."

Applicants respectfully submit that Berken at page 5-8 teaches the routing of packet based upon "an appropriate time" when packets are sent or received by the various elements of the system of Berken. Berken fails to make any mention of the use of, for example, "bus control" information or the contents of a "packet header" in the movement of a "packet" from one device to another, as asserted by the Office. Berken teaches the allocation of bandwidth [time slots] before "voice packets" or "data packets" are exchanged, and the deallocation when bandwidth [time slots] is no longer needed. *Id.* at page 10, line 17 to page 11, line 6. Applicants respectfully submit that Berken fails to make any mention of setting the contents of a "packet header", "bus control" element, or any other portion of a "packet" to cause routing of the "packet" from one device to another, as would be expected if "...digital voice packets wirelessly communicated by the at least one portable terminal comprise destination information used for routing the digital voice packets through the communication network...", as recited by Applicants' claim 22. If the Office believes that the Applicants' interpretation of Berken is in error, Applicants respectfully request that the Office clearly and specifically identify Applicants' errors, and explain how and why the Office interprets the cited art to arrive at the assertions of the Office action. Applicants respectfully submit that the Office has not asserted that any of the remaining cited art remedies the shortcomings of Berken set forth above. Therefore, Applicants respectfully submit that the proposed combination of references does not teach or suggest at least these aspects of Applicants' claim 22.

In addition, Applicants respectfully submit that amended claim 22 recites, in part, "...wherein the at least one portable terminal evaluates a message wirelessly received from the at least one access device and sends to the at least one access device an indication of a data rate based on the evaluation;..." **and** "...wherein the at least one

access device selects a data rate for transmitting digital voice packets and digital data packets to the at least one portable terminal, based upon the indication of a data rate." Applicants respectfully submit that the cited art does not teach or suggest at least these aspects of Applicants' claim 22.

Applicants appreciate recognition by the Office that "...neither Berken nor Richter explicitly discloses "evaluates a message wirelessly received from the at least one access device, sends indication of a data rate on the evaluation and selects a data rate based upon the indication of a data rate." See Office action of September 3, 2008 at page 6. Applicants respectfully note that the Office has omitted some of the text of these aspects of Applicants' claim 22 in its admission of the shortcomings of Berken and Richter. However, Applicants respectfully note that M.P.E.P. §2143.03, as shown above, requires that "...all the claim limitations must be taught or suggested by the prior art..." and that "...[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art."

The Office then turns to only Mahany to remedy the admitted deficiencies of Berken and Richter and states, at pages 6-7, in part, "...Mahany discloses the portable terminal device (see FIG. 4, mobile terminal unit 80) evaluates a message wirelessly received (see FIG. 4, evaluates a poll or test message; also see FIG. 10, 11, 7A-7B for poll message and see FIG. 8A 8B, 9A-9B, for test message; see col. 5, line 44-67; see col. 8, line 60 to col. 9, line 55; see col. 10, line 35 to col. 12, line 69) from the at least one access device (see FIG. 4, from base station 70) and sends to the at least one access device an indication of a data rate on the evaluation (see FIG. 4, transmits to the base station 70 a response data rate message based on the evaluation; see col. 5, line 44-67; see col. 8, line 60 to col. 9, line 55; see col. 10, line 35 to col. 12, line 6; also see method FIG. 17, steps 17-2 to 17-5; see col. 21, line 56 to col. 22, line 39) and wherein the at least one access device selects a data rate for transmitting data/packets to the portable terminal device, based upon the indication of a data rate (see FIG. 7A-B, 8A-B, the base station 70 selects and switches a high/low data rate for transmitting data/packets to mobile terminal unit 80 based on evaluated response message which indicates high data rate or low data rate; col. 5, line 44-67; see col. 8, line 60 to col. 9,

line 55; see col. 10, line 35 to col. 12, line 6; also see method FIG. 17, steps 17-6, 17-8, 17-9, 17-10, 17-12, 17-14, 17-14, 17-18, 17-20; see col. 21, line 56 to col. 22, line 39)." Applicants respectfully disagree.

As an initial matter, Applicants respectfully note that this rejection by the Office cites large portions of Mahany interspersed with copies of the language of Applicants' claim 22, but fails to offer any explanation or interpretation of the cited art that makes clear what in the cited portion or figure teaches the elements of Applicants' claim, as is required by M.P.E.P. §2142. Applicants respectfully submit that the rejections of these aspects of Applicants' claim 22 do not meet the requirements to establish a *prima facie* case of obviousness, in that they do not provide the "...clear articulation of the reason(s) why the claimed invention would have been obvious..." required by M.P.E.P. §2142. Therefore, Applicants' claim 22 is allowable for at least this reason.

Applicants respectfully submit that the Office cites the entirety of Figs. 4, 10, 11, 7A, 7B, 8A, 8B, 9A, and 9B as teaching Applicants' claimed feature "...the portable terminal device evaluates a message wirelessly received...", without providing any explanation of how or why an element in the figure teaches this aspect of Applicants' claim 22. Applicants are unable to find any mention of "evaluating" in the cited figures, what is being evaluated, and what element is performing the evaluation. Applicants respectfully submit that simply citing an entire figure, or in this case the entirety of nine figures, without providing explicit analysis supporting a rejection under 35 U.S.C. 103 does not meet the requirements of M.P.E.P. §2142 to establish a *prima facie* case of obviousness. Applicants respectfully request that any subsequent Office action, should one be issued, provide more targeted and specific citations including explanations of how and why cited figures of the references teach Applicants' claimed features, in accordance with M.P.E.P. §2142.

Applicants also respectfully submit that the Office cites Mahany at col. 5, lines 44-67; col. 8, line 60 to col. 9, line 55; col. 10, line 35 to col. 12, line 69; and col. 21, line 56 to col. 22, line 39. Applicants now address the cited portions of Mahany, beginning with col. 5, lines 44-67, which the Office identifies as teaching "...wherein the at least

one portable terminal device evaluates a message wirelessly received from the at least one access device and sends to the at least one access device an indication of a data rate based on the evaluation;...” **and** “...wherein the at least one access device selects a data rate for transmitting digital voice packets and digital data packets to the at least one portable terminal device, based upon the indication of a data rate.” Due to the volume of text cited by the Office, Applicants will not reproduce herein the cited portions of the Mahany reference.

Applicants respectfully submit that Mahany at col. 5, lines 44-67 simply describes Fig. 4, which Mahany notes illustrates “standard system timing” of a particular product family. Applicants are unable to find even a mention of “evaluation”, or the “evaluation of a message” as in Applicants’ claimed feature “at least one portable terminal device evaluates a message wirelessly received....” Applicants also respectfully submit that this cited portion does not teach Applicants’ claimed feature “...send[ing] to the at least one access device an indication of a data rate...”, let alone where the indication of a data rate is “...based on the evaluation [by the portable terminal device].” Further, Applicants respectfully submit that Mahany at col. 5, lines 44-67 does not teach “an access device” that “...selects a data rate for transmitting digital voice packets and digital data packets”, or basing such selection upon an “indication of data rate [resulting from evaluation by a portable terminal device].” Therefore, Applicants respectfully submit that Mahany at column 5, lines 44-67 does not teach or suggest at least these aspects of Applicants’ claim 22.

Applicants now address Mahany at col. 8, line 60 to col. 9, line 55. This cited portion of Mahany teaches a “base station 70” polling a “[mobile] terminal unit 80”. Mahany discloses that the “[mobile] terminal unit 80” responds to the poll by transmitting a response at a “high data rate”. Mahany states that “...if the base station properly received the message at the high data rate, the base could transmit an acknowledgement at the standard data rate.” *Id.* at col. 9, lines 5-7. The cited portion also teaches that “[t]he base station 70 may receive the high data rate message and issue an acknowledgement at the standard rate during interval 141. If the message is received [by the base station] with an unacceptable number of errors, controller 71 [in

the base station] may be programmed to transmit a switchover signal to mobile unit #3, e.g., during interval 141, commanding that the message [from the mobile unit #3] be retransmitted at the standard rate....” Applicants respectfully submit that this cited portion of Mahany teaches that the “base station”, rather than the “mobile unit”, evaluates a received message **and** causes the “mobile unit” to retransmit a message received with an unacceptable number of errors. Therefore, Applicants respectfully submit that Mahany at col. 8, line 60 to col. 9, line 55 does not teach or suggest “...wherein the at least one portable terminal evaluates a message wirelessly received from the at least one access device and sends to the at least one access device an indication of a data rate based on the evaluation;...” and also does not teach or suggest “...wherein the at least one access device selects a data rate for transmitting digital voice packets and digital data packets to the at least one portable terminal device, **based upon the indication of a data rate [sent by the at least one portable terminal].**” Accordingly, Applicants respectfully submit that the portion of Mahany at col. 8, line 60 to col. 9, line 55 does not teach or suggest at least these aspects of Applicants’ claim 22.

Applicants now address Mahany at col. 10, line 35 to col. 12, line 6. As an initial matter, Applicants respectfully note that the Office repeats verbatim in three instances, citations for the portions of Mahany addressed above, as a group, including the present citation. In one of the three group of citations, however, the ending line of the citation now being addressed is shown as “line 69” instead of “line 6”. Applicants assume the digit “9” to be a typographical error, in that there is no “line 69” in col. 12 of Mahany. If this assumption is in error, Applicants respectfully request clarification from the Office.

Applicants respectfully submit that the portion of Mahany at col. 10, line 35 to col. 12, line 6 teaches communication of the temperature of the “base unit 71” to the “mobile unit 80”, and the use of temperature information to aid data rate selection. Mahany states that “...[e]ach mobile unit having a message to transmit will evaluate the temperature condition at the base 70 in relation to its ambient temperature as sensed at 83A, FIG. 6, and determine the correct data rate for [transmission of] its message.” *Id.* at col. 11, lines 15-19. Mahany also states that “...Similarly for the case of FIG. 8B,

each mobile unit such as 80 having a message to transmit will evaluate the base temperature information in relation to its ambient temperature, and respond in a selected time slot such as 178 with a message indicating its address and whether its message will be transmitted at the standard data rate or at the higher data rate." *Id.* at col. 11, lines 25-31. Although this cited portion does teach "evaluation", it is the evaluation of a temperature of the "base station 70" in relation to the "ambient temperature" of the "mobile unit80". Applicants respectfully submit that evaluation of a temperature is different from and does not teach or suggest evaluation of "...a received message...", as recited by Applicants' claim 22. Therefore, Applicants respectfully submit that the cited portion of Mahany at col. 10, line 35 to col. 12, line 6 does not teach or suggest, at least, Applicants' claim 22 features "...wherein the at least one portable terminal evaluates a message wirelessly received from the at least one access device and sends to the at least one access device an indication of a data rate based on the evaluation;..." and also does not teach or suggest "...wherein the at least one access device selects a data rate for transmitting digital voice packets and digital data packets to the at least one portable terminal device, based upon the indication of a data rate [sent by the at least one portable terminal]."

Finally, the Office cites Mahany at col. 21, line 56 to col. 22, line 39 as teaching Applicants' claim 22 features. Applicants now address the cited portion of the Mahany reference at col. 21, line 56 to col. 22, line 2, which is reproduced below:

GENERALIZED EXAMPLE

(protocol independent)

Consider a radio system that consists of several units, each with a unique address.

(1) In the simplest case, the system may consist of two units, #1 and #2, one or both of which are mobile.

(2) In a standby mode of operation both units program their receivers to receive at the low data rate.

(3) When a unit has information to communicate, it switches to transmit at the standard rate, and sends a query to the other (target) unit. Following this transmission, the unit switches to once again receive at the standard rate.

This first portion of Mahany at column 21, line 56 to column 22, line 2, teaches that in a "standby" mode, a unit receives at a "low" data rate, and that when a unit has information to communicate, it switches to a "standard" data rate, sends a query to a "target" (receiving) unit, and then switches back to the "low" data rate. Applicants respectfully submit that the use of the recited data rates is not "based upon the indication of a data rate [sent to the base station by the at least one portable terminal]", in accordance with Applicants' claim 22. Applicants now review the cited portion of Mahany at column 22, lines 3-19, which recites:

(4) If the target unit for some reason (e.g. out of range) does not correctly receive the query it makes no response. After a time out period, the initiating unit may periodically attempt to re-establish the link.

(5) If the target unit correctly receives the transmission it performs an analysis to determine the quality of the radio link (propagation path and radio hardware). This may involve combinations of signal strength measurement, jitter in the received data, or use of information communicated in the transmission. A transmission which is to be evaluated as an aid to deciding on a dynamic basis whether a high data rate is feasible is herein termed a "test signal" or "test transmission." Based upon the results of the analysis, the unit determines whether to utilize the standard data rate or a higher rate for a subsequent communications session between the two units.

(emphasis added)

This cited portion of Mahany teaches that if the "target" (receiving) unit does not receive the "query", it does not respond, and that the "sending" unit may periodically retry. However, if the "target" (receiving) unit does receive the query, the "target"

(receiving) unit performs an analysis to determine the quality of the radio link. The "target" (receiving) unit then determines whether to use the "standard" data rate or a "higher" data rate for communication between the units. In other words, the receiving end of the communication link (the one that performed the analysis), determines what data rate will be used to transmit information sent to it.

Applicants now look at the cited portion of Mahany at column 22, lines 20-24, shown below:

(6) The target unit completes the handshake by switching to transmit at the standard rate and communicates its data rate selection to the initiating unit. It then switches to receive at either the standard or higher data rate depending on which it has selected.

(emphasis added)

Thus, Mahany teaches that the "target" (receiving) unit selects the data rate to be used in sending data to it. We now turn to the cited portion of Mahany, at column 22, lines 25-39, which state:

(7) The initiating unit, upon receipt of the return handshake, switches to transmit its message at the selected data rate.

(8) Upon receipt of an end of message indication from 30 the initiating unit, the target unit, switches to transmit at the selected rate, and sends a response or acknowledgement to the initiating unit.

(9) If the high rate has been selected, and for some reason signal propagation conditions change during the 35 communications session such that communication at the high rate becomes impossible, the units would after a timeout period attempt to re-establish the session at the standard data rate.

(emphasis added)

This last portion makes clear that the unit that initiated the communication of information to the “target” (receiving) unit switches to a data rate selected by the “target” (receiving) unit. The “target” (receiving) unit then sends a response or acknowledgement to the “initiating” (sending) unit. If communication at the “high rate” becomes impossible, the units re-establish a session at the “standard” rate.

Applicants respectfully submit that the portions of Mahany at col. 22, lines cited by the Office do not teach or suggest Applicants’ claim 22 which states, in part, “...wherein the at least one portable terminal evaluates a message wirelessly received from the base station and sends to the base station an indication of a data rate based on the evaluation; **and** wherein the at least one portable terminal receives **digital voice packets transmitted by the base station** at a data rate **selected by the base station** based upon the indication of a data rate...”, in accordance with Applicants’ claim 22. Applicants respectfully submit that, in contrast, the cited portions of Mahany teach that a receiving first unit performs an analysis, and that the first unit **selects a data rate** to be used by the transmitting second unit for transmitting information to the first unit. In Mahany, it is the receiving unit that selects the data rate, and the sending unit simply uses the selected rate provided to it by the receiving unit. It is clear from the cited portions of Mahany that there is no selection of a data rate at the sending unit, based upon an indication of data rate [sent to it by another unit].

Applicants’ claimed feature allows the “base station” to take other factors into account in selecting a data rate to use in transmission to the portable terminal device. Applicants respectfully submit that the unit in Mahany that initiates the communication, (that is, the one transmitting information) does not select the data rate. Mahany teaches that only the data rate sent to it by the receiving unit is used. The word “select” may be reasonably defined as “...to choose (as by fitness or excellence) from a number or group: pick out....” See Merriam-Webster’s Collegiate Dictionary, Tenth Edition, ©2002, Merriam-Webster, Incorporated, page 1056. Thus, “selection” requires alternatives, and the cited portions of Mahany do not teach that the sending unit has any choice in the data rate to be used. Instead, the sending unit simply uses the data rate selected by the unit that is receiving the information (that is, the “target” unit of Mahany). Therefore,

the cited portions of Mahany fail to teach or suggest at least this patentably distinct aspect of Applicants' claim 22.

Applicants again respectfully note that the Office cited only Mahany as teaching the above aspects of Applicants' claim 22. Because the Office admitted that the Berken and Richert references do not teach these aspects of Applicants' claim 22, and Applicants have shown that the cited portions of Mahany also do not teach or suggest these features, Applicants respectfully submit that it necessarily follows that the proposed combination of references cannot teach or suggest at least these patentable aspects Applicants' claim 22.

Applicants again respectfully note that M.P.E.P. §2143.03 states, in part:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

(emphasis added)

Based at least upon the above, Applicants respectfully submit that the proposed combination of Berken, Richter, and Mahany does not teach or suggest all of the features of Applicants' claim 22, as required by M.P.E.P. §2143.03, that a *prima facie* case of obviousness has not been established as required by M.P.E.P. §2142, and that claim 22 is allowable over the proposed combination of references for at least the reasons set forth above. Because claims 23-38, 93-96, 105, and 106 depend from allowable claim 22, Applicants respectfully submit that claims 23-38, 93-96, 105, and 106 are also allowable over the proposed combination of references. Accordingly, Applicants respectfully request that the rejection of claims 22, 24, 25, 28-30, and 33-38 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

With regard to independent claims 39, 58, and 73, Applicants respectfully submit that independent claims 39, 58, and 73 have been amended in a manner similar to independent claim 22, and recite features similar in many ways to the features of independent claim 22. Applicants respectfully submit that independent claims 39, 58, and 73, and any claims that depend therefrom, are therefore allowable over the proposed combination of references for at least some of the reasons set forth above in response to the rejection of independent claim 22. Accordingly, Applicants respectfully request that the rejections of claims 39, 41, 42, 45-47, 50-58, 61, 63-66, 69-73, 76, 82-86 and 89-104 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

II. The Proposed Combinations Of Berken, Richter, And Mahany With Any Of Cripps, Perkins, Callon, Reece, Lewen, McKee, And Focsaneanu Do Not Render Claims 23, 26, 27, 31, 32, 40, 43, 44, 48, 49, 59, 60, 62, 67, 68, 74, 75, 77-81, 87, And 88 Unpatentable

Applicants respectfully submit that Berken, Richter, and Mahany when combined with any or all of Cripps, Perkins, Callon, Reece, Lewen, McKee, and Focsaneanu do not render independent claims 22, 39, 58, and 73 unpatentable, for at least the reasons set forth above. Accordingly, Applicants respectfully submit that the proposed combinations of references also do not render unpatentable claims 23-38, 40-57, 59-72, and 93-104, which depend either directly or indirectly from independent claims 22, 39, 58, and 73, for at least the same reasons. Therefore, Applicants respectfully request that the rejections of claims 23, 26, 27, 31, 32, 40, 43, 44, 48, 49, 59, 60, 62, 67, 68, 74, 75, 77-81, 87 and 88 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

III. The Proposed Combination Of Berken, Shachar, And Mahany Does Not Render Claims 22, 39, 58, 63, And 73 Unpatentable

Claims 22, 39, 58, 63, and 73 were rejected under 35 U.S.C. 103(a) as being unpatentable over Berken, Shachar, and Mahany.

With regard to independent claims 22, 39, 58, and 73, Applicants have demonstrated the failure of the Berken and Mahany references to teach certain aspects of claims 22, 39, 58, and 73. Applicants respectfully submit that the Office relies on Mahany to teach the same admitted deficiencies of Berken and Richter that are also admitted deficiencies of the proposed combination of Berken and Shachar. Applicants have shown that Mahany does not overcome those admitted deficiencies, for at least the reasons set forth above. Therefore, Applicants respectfully submit that claims 22, 39, 58, and 73 are allowable over the proposed combination of Berken, Shachar, and Mahany, for many of the same reasons set forth above with respect to the rejection of claims 22, 39, 58, and 73 with respect to Berken, Richter, and Mahany. In addition, dependent claim 63 is allowable for at least the reason that it depends from allowable claim 58.

Therefore, for at least the reasons set forth above, Applicants believe that the Berken, Shachar, and Mahany references, taken alone or in combination, fail to render unpatentable amended independent claims 22, 39, 58, and 73, that amended claims 22, 39, 58, and 73 are allowable over Berken, Shachar, and Mahany, and that Berken, Shachar, and Mahany also do not render unpatentable claims 23-38, 93-96, 105, and 106, claims 40-57, 97-100, 107, and 108, claims 59-72, 101-104, 109, and 110, and claims 74-92, 111, and 112, that depend, respectively, therefrom. Accordingly, Applicants respectfully request that the rejection of claims 22, 39, 58, 63, and 73 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

Newly Added Claims

Applicants have added new dependent claims 105-112. Claims 105 and 106 depend from independent claim 22, claims 107 and 108 depend from independent claim 39, claims 109 and 110 depend from independent claim 58, and dependent claims 111 and 112 depend from independent claim 73. Support for claims 105-112 may be found, for example, at pages at pages 32, 39-66, 123, 154, and 260-264, and at Figs. 2, 3a, 3b, 6a, 6b, 7a, 7b, 8, 21, 22, 23, 24, and 55a of the Application. Applicants respectfully

submit that these new claims do not add new matter, and are allowable for at least the reasons set forth above with respect to independent claims 22, 39, 58, and 73.

Conclusion

In general, the Office Action makes various statements regarding the pending claims and the cited references that are now moot in light of the above. Thus, Applicants will not address such statements at the present time. However, Applicants expressly reserve the right to challenge such statements in the future should the need arise (e.g., if such statements should become relevant by appearing in a rejection of any current or future claim).

The Applicants believe that all of pending claims 22-112 are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicants invite the Examiner to telephone the undersigned at (312) 775-8000. If the Examiner maintains his rejections, the Applicants hereby respectfully request an interview with the Examiner.

The Commissioner is hereby authorized to charge any fees associated with this communication, or credit any overpayment, to Deposit Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

Dated: March 03, 2009

/Kevin E. Borg/
Kevin E. Borg
Reg. No. 51,486

McANDREWS, HELD & MALLOY, LTD.
500 West Madison Street, 34th Floor
Chicago, Illinois 60661
Phone (312) 775-8000
Facsimile (312) 775-8100